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R313 UBJECT: Panel-Type Wall and Ceiling Construction

Meat packers often ask to use various types of paneling for wall and occasionally for ceilings in packing plants. They cite good reasons, such as: (1) Speed and ease of erection, (2) possibility of salvage and relocation of partitions should operations change, and (3) favorable cost relationship as compared to conventional impervious wall structures.

Several types of wall panels have been accepted for use in federally inspected plants. When properly installed and maintained, they have proved satisfactory.

Such panels usually consist of either a sandwich type unit with insulation between two impervious surface plies or (if insulation is not required) the panel may consist of a relatively thin single sheet of material, usually 3' to 4' wide and long enough to extend from floor to ceiling.

Most panels evaluated by the Meat Inspection Division are constructed of exterior grade plywood or cement asbestos board (1/8" to 1/4" thick), overlaid with a rust-resisting metal (aluminum or stainless steel) or with a plastic, enamel-like coating. These coatings may or may not be reinforced with fiberglass.

To be acceptable to the Meat Inspection Division, wall panels must conform to the following standards:

- (1) The surface must be smooth, hard, and impervious, and must be securely affixed to the substrate. If a metal surface is used, it must be of rust-resisting material, such as aluminum or stainless steel. Galvanized metal-furfaced panels are not desirable because zinc has low resistance to corrosion in ordinary packing plant atmosphere. Panels factory finished with a durable MID-approved resinous coating are suitable for locations where they will not be subjected to severe physical abuse.
- (2) The subsurface portion of the panel must be a durable, dense, reasonably impervious material such as exterior grade plywood or cement asbestos board.



(3) For easier cleaning, panels should be installed on top of a curb constructed of concrete or brick, with a coved juncture of the curb and floor. The panel should be erected flush with the outer edges of the curb (See Figure 1 below), or preferably on a curb constructed as illustrated in Figures 2 and 3. A curb of this type provides good protection for the panels from damage by truck wheels, barrels, pallets, etc. If such a curb is not used, a suitable bumper or other protective device must be installed to minimize damage from impact or abrasion.

Panels should be installed so that space between adjacent units is held to a minimum. Rather than covering such spaces with batten strips, they should be sealed with a flexible compound approved by the Meat Inspection Division. The sealant should be applied when the panels are erected and the excess removed by a suitable tool to provide a smooth surface at the joist. Figure 3 illustrates the recommended method of installing panels.



